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(54) Title: METHOD FOR MANUFACTURING GARNET SINGLE CRYSTAL AND GARNET SINGLE CRYSTAL MANUFACTURED THEREBY

(57) Abstract: Disclosed herein is a method for manufacturing a magnetic garnet single crystal from a melt containing an alkali metal oxide or carbide, garnet single crystal raw materials and Bi₂O₃-B₂O₃-PbO as a flux by liquid phase epitaxy (LPE) wherein the garnet single crystal is grown at a relative low temperature due to a reduced viscosity of the melt, and the grown garnet single crystal has a uniform thickness and a specular surface without any crystal defects. Further disclosed is a magnetic garnet single crystal manufactured by the method.



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